

# **EXHIBIT 14**

## **REDACTED**

## Message

**From:** [REDACTED]@google.com]  
**Sent:** 11/12/2009 10:14:56 PM  
**To:** [REDACTED]@google.com]  
**CC:** [REDACTED]@google.com]; [REDACTED]@google.com]; [REDACTED]  
[REDACTED]@google.com]  
**Subject:** Re: [REDACTED] Re: AdX auction stats per seller

On Thu, Nov 12, 2009 at 11:23 AM, [REDACTED]@google.com> wrote:

On Thu, Nov 12, 2009 at 11:08 AM, [REDACTED]@google.com> wrote:

> Hi [REDACTED],

>

> I had started responding to [REDACTED] so I'll just combine it here.

>

> Yes B and P are the old names for P1 and P2, i.e. the highest bid and  
> the second highest. Thanks! I updated the doc.

>

> Re: buyer strategy -- the real strategy includes both what we  
> provide and what they do outside the system that influences their  
> action (whether through UI or API). In that sense, even things like  
> analytics/conversion tracking etc. can be thought of as buyer strategy  
> features... So whether for buyers or sellers, if there's something  
> rational that they frequently do on their own, and that we could  
> automate for them, then yes I would say we should consider making it a  
> feature.

>

> For the same reason, optimizing min CPM is not really biasing us in  
> favor of the seller against the buyer, we are not giving the seller  
> any information about the \*current\* auction or about any specific  
> buyer's future actions. We don't necessarily reveal the winning bids  
> any more than we currently do. [REDACTED]

[REDACTED]

>

> So it's just enhancing the efficiency of the market to automate  
> existing rational behavior (for the given auction rules... and of  
> course we should keep those rules such that the rational behavior is  
> simple!)

Not sure. I guess it's probably something that I cannot simply answer.

First, automating and looking behind the scene and getting the number  
is different.

Second, one way to optimize buyer's action would be [REDACTED]

[REDACTED]  
I don't mind.

If we can automate what advertisers would do -- for example, adjusting their bids and trying to figure out what the minimum price to win the slot is,

Right we would do that... In fact we already do, right? On two levels:

1) we do recommend the optimal bid price for the buyer, since we say they should bid their true value, and that is still optimal, even given that the seller sets an optimized floor price... (As long as that floor price is not determined by this buyer's own behavior which is why we have to make sure [REDACTED])

2) we do help them figure out what the "true" value is by e.g. providing them clicks and impressions (instead of only clicks if they are charged by clicks and only impressions if they are charged by impression), as well as analytics and conversion tracking etc. Those are all forms of automating some aspect of the buyer's strategy in the larger sense

or if we can just get the numbers based on the past bids and past costs, that's fine with me too, as long as we're not using or providing data that are not supposed to be available to them.

Yes, I agree that it is necessary to [REDACTED]

[REDACTED]  
> On Thu, Nov 12, 2009 at 9:52 AM, [REDACTED]@google.com> wrote:

>> This is an important discussion. Say highest bid was H and second highest bid S. We run second price auction, upto reserve price R.

>>

>> Publishers have information about  $\max(S, R)$  anyway. What they don't know is H, which presumably they will try to find by playing with R and which advertisers will try to hide by responding with H's.

>>

>> I think it is suspect sharing information about H's explicitly with the publishers. [REDACTED]  
[REDACTED]  
[REDACTED]

>>

>> [REDACTED]

>>

>>

>> On Thu, Nov 12, 2009 at 8:45 AM, [REDACTED]@google.com> wrote:

>>>

>>> [REDACTED],

>>>

>>> Thanks for the write-up. I have couple of questions.

>>>

>>> What's "B and P" (search for it)? Are they P0 and P1?

>>>

>>> Will there be a strategy for buyers as well?

>>>

>>> And most importantly, aren't we just gaming advertisers with "revenue

>>> maximizing floor price" on behalf of publishers (maybe because our

>>> revenue aligns with pub's revenue) based on the information

>>> (statistics) that are supposed to be hidden from publishers? Typically

>>> max bid is confidential information that belong to only the advertiser

>>> who made it, and I think so is its statistics or even its aggregates.

>>> Not sure providing floor price based on this information to publishers

>>> is okay.

>>>

>>> When we say "enter your true max CPM value here", we can't mean "enter

>>> your true max CPM value here, but we may use the statistics based on

>>> what you enter here against you to charge you more".

>>>

>>> Thanks,

>>> [REDACTED]

>>>

>>> On Wed, Nov 11, 2009 at 4:32 PM, [REDACTED]@google.com> wrote:

>>> > I've added some "optimal" reserve prices per seller.

>>> >

>>> > Here's the design/analysis doc

>>> >

>>> > [https://docs.google.com/a/google.com/View?docID=dc4gpb7x\\_58hhgi7qfv&revision=\\_latest](https://docs.google.com/a/google.com/View?docID=dc4gpb7x_58hhgi7qfv&revision=_latest)

>>> > Summary table

>>> >

>>> >

>>> <http://spreadsheets.google.com/a/google.com/pub?key=tvS3DjCZMvXF7nsfqIqaT4A&single=true&gid=1&output=html>

>>> > Raw data: same location as below.

>>> >

>>> >

>>> > 2009/11/9 [REDACTED]@google.com>

>>> >>

>>> >> Here are some very basic statistics grouped by seller, for a 1 week

>>> >> period:

>>> >>

>>> >>

>>> >> Each graph represents one seller and has three plots, [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

>> [REDACTED]

[REDACTED]

>>> >> Next step I will plug in [REDACTED]

[REDACTED]

>>> >

>>>

>>> --

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